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## (54) IMAGE PICKUP DEVICE

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide one image pickup device for independently obtaining a color image and a near-infrared light image.

SOLUTION: A color filter of cyan(Cy), yellow(Ye), and magenta(Mg), and a filter (X) with nearly constant transmittance regardless of wavelength visible light and near-infrared light regions are formed at each pixel formed by CMOS having sensitivity in the visible light and the near-infrared light. By linearly connecting the output of the pixel of four types of color filters, the wavelength transmission characteristics of four types of filters Cy, Ye, Mg, and X are adjusted to obtain blue, green, red, and near-infrared intensity of a surrounded point, thus obtaining visible light color and near-infrared light images independently. The visible light color image and the near-infrared light image are automatically switched for outputting according to the intensity of the visible light color image.

	T	т —	T	<del></del>
Mg	X	Mg	X	
	(46)	(1,2)	(1.3)	(14)
Ye	Су	Ye	Су	
•	(2,1)	(7,2)	(2.3)	(2,4)
Mg	X	Mg	X	
	<b>(21)</b>	(3,E)	(2,5)	<u>550</u>
Ye	Су	Ye	Су	
	<b>'A1</b> }	(A.E.)	(43)	(0,4)
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